



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1109; Directorate Identifier 2011-NM-172-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to certain The Boeing Company Model 757-200 and -200PF series airplanes. The existing AD currently requires modification of the nacelle strut and wing structure, and repair of any damage found during the modification. Since we issued that AD, a compliance time error involving the optional threshold formula was discovered, which could allow an airplane to exceed the acceptable compliance time for addressing the unsafe condition. This proposed AD would specify a maximum compliance time limit that overrides the optional threshold formula results. We are proposing this AD to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office (ACO), FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: Nancy.Marsh@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-1109; Directorate Identifier 2011-NM-172-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On August 29, 2003, we issued AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), for certain Model 757 series airplanes powered by Pratt & Whitney engines. That AD requires modification of the nacelle strut and wing structure, and repair of any damage found during the modification. That AD resulted from reports indicating that the actual operational loads applied to the nacelle are higher than the analytical loads that were used during the initial design. Subsequent analysis and service history, which included numerous reports of fatigue cracking on certain strut and wing structure, indicated that fatigue cracking can occur on the primary strut structure before an airplane reaches its design service objective. We issued that AD to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut.

Actions Since Existing AD (68 FR 53496, September 11, 2003) Was Issued

Since we issued AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), an error in the optional threshold formula of the compliance time was discovered. If the optional threshold formula is used, it could result in an unacceptable compliance time for addressing the unsafe condition.

Relevant Service Information

AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), refers to Boeing Service Bulletin 757-54-0034, dated May 14, 1998; or Revision 1, dated October 11, 2001; as the appropriate source of service information for modifying the nacelle strut and wing structure. Boeing has since revised this service bulletin. We reviewed Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009. This service bulletin specifies a compliance time that limits the results from the optional threshold compliance time formula to within eight years from the issuance date of this service bulletin.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would retain all requirements of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003). This proposed AD would reduce certain compliance times. The optional threshold formula method is limited to within eight years after the effective date of the AD. This proposed AD would also require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between the Proposed AD and the Service Information."

Change to Existing AD (68 FR 53496, September 11, 2003)

This proposed AD would retain all requirements of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003). Since AD 2003-18-05 was issued, the AD format has been revised, and certain paragraphs have been rearranged. As a result, the corresponding paragraph identifiers have changed in this proposed AD, as listed in the following table:

Revised paragraph identifiers

| Requirement in AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003) | Corresponding requirement in this proposed AD |
|---|--|
| paragraph (a) | paragraph (g) |
| paragraph (b) | paragraph (h) |
| paragraph (c) | paragraph (i) |
| paragraph (d) | paragraph (j) |

Differences Between the Proposed AD and the Service Information

Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009, specifies to contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Costs of Compliance

We estimate that this proposed AD affects 278 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|--|---|------------|------------------|------------------------|
| Modification [retained actions from AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003)] | 800 work-hours X \$85 per hour = \$68,000 | \$0 | \$68,000 | \$18,904,000 |

The new requirements of this proposed AD add no additional economic burden.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), and adding the following new AD:

The Boeing Company: Docket No. FAA-2012-1109; Directorate Identifier 2011-NM-172-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003).

(c) Applicability

This AD applies to The Boeing Company Model 757-200 and -200PF series airplanes, certificated in any category, line numbers 1 through 735 inclusive, powered by Pratt & Whitney engines.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 54, Nacelles/Pylons.

(e) Unsafe Condition

This AD was prompted by reports indicating that the actual operational loads applied to the nacelle are higher than the analytical loads that were used during the initial design. Subsequent analysis and service history, which includes numerous reports of fatigue cracking on certain strut and wing structure, indicated that fatigue cracking can occur on the primary strut structure before an airplane reaches its design service objective. We are issuing this AD to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Modification, with New Service Information and Reduced Compliance Time

This paragraph restates the requirements of paragraph (a) of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), with new service information and a reduced compliance time. Modify the nacelle strut and wing structure on both the left and right sides of the airplane, in accordance with Boeing Service Bulletin 757-54-0034, dated May 14, 1998; Boeing Service Bulletin 757-54-0034, Revision 1, dated October 11, 2001; or Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009; at the later of the times specified in paragraph (g)(1) or (g)(2) of this AD. As of the effective date of this AD, only Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009, may be used to accomplish the actions required by this paragraph.

(1) At the earlier of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD.

(i) Prior to the accumulation of 37,500 total flight cycles.

(ii) At the later of the times specified in paragraphs (g)(1)(ii)(A) or (g)(1)(ii)(B) of this AD.

(A) Within 20 years since the date of manufacture.

(B) Within the compliance time calculated using the optional threshold formula described in Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009, or within 8 years after the effective date of this AD, whichever occurs first.

(2) Within 3,000 flight cycles after November 13, 2000 (the effective date of AD 2000-20-09, Amendment 39-11920 (65 FR 59703, October 6, 2000)).

(h) Retained Concurrent Requirements, with New Service Information

This paragraph restates the requirements of paragraph (b) of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), with new service information. Except as provided by paragraph (j) of this AD: Prior to or concurrently

with the accomplishment of the modification of the nacelle strut and wing structure required by paragraph (g) of this AD, accomplish the actions specified in Boeing Service Bulletin 757-54-0027, Revision 1, dated October 27, 1994; and Boeing Service Bulletin 757-54-0036, dated May 14, 1998, or Boeing Service Bulletin 757-54-0036, Revision 1, dated July 31, 2006; as applicable; in accordance with those service bulletins. As of the effective date of this AD, use only Boeing Service Bulletin 757-54-0036, Revision 1, dated July 31, 2006, to accomplish the requirements of this paragraph.

(i) Retained Repair, with New Service Information

This paragraph restates the requirements of paragraph (c) of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), with new service information. If any damage to airplane structure is found during the accomplishment of the modification required by paragraph (g) of this AD, and Boeing Service Bulletin 757-54-0034, dated May 14, 1998; Boeing Service Bulletin 757-54-0034, Revision 1, dated October 11, 2001; or Boeing Service Bulletin 757-54-0034, Revision 2, dated May 7, 2009; specifies to contact Boeing for appropriate action: Before further flight, repair the damage using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(j) Retained Modification, with New Service Information

This paragraph restates the requirements of paragraph (d) of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), with new service information. Modify the nacelle strut (including replacing the upper link with a new, improved part, and modifying the wire support bracket attached to the upper link), in accordance with Boeing Service Bulletin 757-54-0036, dated May 14, 1998; or Boeing Service Bulletin 757-54-0036, Revision 1, dated July 31, 2006; at the earlier of the times specified in paragraphs (j)(1) and (j)(2) of this AD. As of the effective date of this AD,

use only Boeing Service Bulletin 757-54-0036, Revision 1, dated July 31, 2006, to accomplish the requirements of this paragraph.

(1) Prior to or concurrently with accomplishment of the modification of the nacelle strut and wing structure required by paragraph (g) of this AD.

(2) Prior to the accumulation of 27,000 total flight cycles (for Model 757-200 series airplanes) or 29,000 total flight cycles (for Model 757-200PF series airplanes), or within 2 years after October 16, 2003 (the effective date of AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003)), whichever is later.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to:

9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(4) AMOCs approved previously in accordance with AD 2003-18-05, Amendment 39-13296 (68 FR 53496, September 11, 2003), are approved as AMOCs for the corresponding provisions of this AD.

(I) Related Information

(1) For more information about this AD, contact Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6440; fax: 425-917-6590; email: Nancy.Marsh@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; phone: 206-544-5000, extension 1; fax: 206-766-5680; Internet: <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on October 16, 2012.

John P. Piccola,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-26477 Filed 10/26/2012 at 8:45 am; Publication Date: 10/29/2012]